REFERENCES 83

[99] V. Le, M. Afshari, and Z. Su, "Compiler Validation via Equivalence Modulo Inputs," in ACM SIGPLAN Conference on Programming Language Design and Implementation, PLDI, pp. 216–226, 2014.

- [100] B. R. Churchill, O. Padon, R. Sharma, and A. Aiken, "Semantic Program Alignment for Equivalence Checking," in *Proceedings of the* 40th ACM SIGPLAN Conference on Programming Language Design and Implementation, PLDI, pp. 1027–1040, 2019.
- [101] V. Le, C. Sun, and Z. Su, "Finding Deep Compiler Bugs via Guided Stochastic Program Mutation," in Proceedings of the 2015 ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications, p. 386–399, 2015.
- [102] E. Schulte, Z. P. Fry, E. Fast, W. Weimer, and S. Forrest, "Software mutational robustness," vol. 15, p. 281–312, sep 2014.
- [103] B. Baudry, S. Allier, and M. Monperrus, "Tailored source code transformations to synthesize computationally diverse program variants," ISSTA 2014, p. 149–159, 2014.
- [104] M. Zalewski, "American Fuzzy Lop," 2017.
- [105] K. Zhang, D. Wang, J. Xia, W. Y. Wang, and L. Li, "ALGO: Synthesizing Algorithmic Programs with Generated Oracle Verifiers," CoRR, vol. abs/2305.14591, 2023.
- [106] L. de Moura and N. Bjørner, "Z3: An Efficient SMT Solver," in *Tools and Algorithms for the Construction and Analysis of Systems*, pp. 337–340, 2008.
- [107] A. Abate, C. David, P. Kesseli, D. Kroening, and E. Polgreen, "Counterexample Guided Inductive Synthesis Modulo Theories," in Proceedings of Computer Aided Verification - 30th International Conference, CAV, vol. 10981, pp. 270–288, 2018.
- [108] P. M. Phothilimthana, A. Thakur, R. Bodík, and D. Dhurjati, "Scaling up Superoptimization," in Proceedings of the Twenty-First International Conference on Architectural Support for Programming Languages and Operating Systems, ASPLOS, pp. 297–310, 2016.
- [109] R. El-Khalil and A. D. Keromytis, "Hydan: Hiding Information in Program Binaries," in *Information and Communications Security, 6th International Conference, ICICS*, vol. 3269, pp. 187–199, 2004.
- [110] V. Singhal, A. A. Pillai, C. Saumya, M. Kulkarni, and A. Machiry, "Cornucopia: A Framework for Feedback Guided Generation of Binaries," in 37th IEEE/ACM International Conference on Automated Software Engineering, ASE 2022, Rochester, MI, USA, October 10-14, 2022, pp. 27:1– 27:13, ACM, 2022.

84 REFERENCES

[111] B. Cox and D. Evans, "N-Variant Systems: A Secretless Framework for Security through Diversity," in *Proceedings of the 15th USENIX*, 2006.

- [112] D. Bruschi, L. Cavallaro, and A. Lanzi, "Diversified Process replicae for Defeating Memory Error Exploits," in Proceedings of the 26th IEEE International Performance Computing and Communications Conference, IPCCC 2007, April 11-13, 2007, New Orleans, Louisiana, USA, pp. 434– 441, IEEE Computer Society, 2007.
- [113] B. Salamat, A. Gal, T. Jackson, K. Manivannan, G. Wagner, and M. Franz, "Stopping Buffer Overflow Attacks at Run-Time: Simultaneous Multi-variant Program Execution on a Multicore Processor," tech. rep., Technical Report 07-13, School of Information and Computer Sciences, UCIrvine, 2007.
- [114] L. Davi, C. Liebchen, A. Sadeghi, K. Z. Snow, and F. Monrose, "Isomeron: Code Randomization Resilient to (Just-In-Time) Return-oriented Programming," in 22nd Annual Network and Distributed System Security Symposium, NDSS 2015, San Diego, California, USA, February 8-11, 2015, The Internet Society, 2015.
- [115] G. Agosta, A. Barenghi, G. Pelosi, and M. Scandale, "The MEET Approach: Securing Cryptographic Embedded Software Against Side Channel Attacks," *IEEE Trans. Comput. Aided Des. Integr. Circuits Syst.*, vol. 34, no. 8, pp. 1320–1333, 2015.
- [116] T. Jackson, B. Salamat, A. Homescu, K. Manivannan, G. Wagner, A. Gal, S. Brunthaler, C. Wimmer, and M. Franz, "Compiler-generated Software Diversity," in *Moving Target Defense - Creating Asymmetric Uncertainty for Cyber Threats*, vol. 54, pp. 77–98, 2011.
- [117] A. Amarilli, S. Müller, D. Naccache, D. Page, P. Rauzy, and M. Tunstall, "Can Code Polymorphism Limit Information Leakage?," in Proceedings of Information Security Theory and Practice. Security and Privacy of Mobile Devices in Wireless Communication - 5th IFIP WG 11.2 International Workshop, WISTP, vol. 6633, pp. 1–21, 2011.
- [118] A. Voulimeneas, D. Song, P. Larsen, M. Franz, and S. Volckaert, "dMVX: Secure and Efficient Multi-variant Execution in a Distributed Setting," in EuroSec '21: Proceedings of the 14th European Workshop on Systems Security, Virtual Event / Edinburgh, Scotland, UK, April 26, 2021, pp. 41–47, ACM, 2021.
- [119] B. De Sutter, B. Anckaert, J. Geiregat, D. Chanet, and K. De Bosschere, "Instruction Set Limitation in Support of Software Diversity," pp. 152–165, 2009.